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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,662	12/08/2000	Bryan J. Moles	SAMS01-00148	4632

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EXAMINER

LE, DANH C

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 02/17/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/733,662

Applicant(s)

MOLES ET AL.

Examiner

DANH C LE

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-3, 5-8, 11-15, 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang (US 2001/0049263).

As to claim 1, Zhang inherently teaches for use in a wireless network (figure 1) comprising a plurality of base stations (cellular network inherently comprising a plurality of base station), each of said base stations capable of communicating with a plurality of mobile stations (110), a mobile station diagnostic testing system capable of testing the operation of a first one of said plurality of mobile stations comprising:

a database capable of storing a mobile station diagnostic testing file comprising a mobile station diagnostic testing program in interpreted byte-code format (paragraph 13-17, data was compiled, encrypted, decrypted); and

a diagnostics controller coupled to said database capable of receiving a notification indicating that a fault has occurred in said first mobile station and further capable, in response to receipt of said notification, of retrieving said mobile station diagnostic testing file from said database and transmitting said mobile station diagnostic

testing file to said first mobile station, wherein receipt of said mobile station diagnostic testing file causes said mobile station to execute said mobile station diagnostic testing program in said mobile station diagnostic testing file (paragraph 13-17).

As to claim 2, Zhang teaches the mobile station diagnostic testing system as set forth in claim 1 wherein said mobile station diagnostic testing file further comprises diagnostics data used to test said first mobile station (paragraph 24).

As to claim 3, Zhang teaches the mobile station diagnostic testing system as set forth in claim 1 wherein said mobile station diagnostic testing file is transmitted to said mobile station using TCP/IP packets (paragraph 25).

As to claim 5, Zhang teaches the mobile station diagnostic testing system as set forth in claim 1 wherein said diagnostics controller is capable of determining from said notification a model type of said first mobile station and, in response to said determination, selecting said mobile station diagnostic testing program according to said model type (paragraph 27).

As to claim 6, Zhang teaches mobile station (figure 1, 110) capable of being tested from a wireless network by an over-the-air (OTA) mobile diagnostic testing process, said mobile station comprising:

an RF transceiver capable of receiving and demodulating forward channel messages from said wireless network and further capable of modulating and transmitting reverse channel messages to said wireless network (paragraph 13-17); and

a main controller capable of receiving said demodulated forward channel messages from said RF transceiver and extracting therefrom a mobile station diagnostic

testing file containing a mobile station diagnostic testing program in interpreted byte-code format, wherein said main controller, in response to receipt of said mobile station diagnostic testing file, is capable of interpreting and executing said mobile station diagnostic testing program (paragraph 13-17).

As to claim 7, Zhang teaches the mobile station as set forth in claim 6 wherein said mobile station diagnostic testing file further comprises diagnostic testing data and wherein said main controller uses said diagnostic testing data to test said mobile station (paragraph 31-34).

As to claim 8, Zhang teaches the mobile station as set forth in claim 6 wherein said mobile station diagnostic testing file is transmitted to said mobile station in said forward channel messages using TCP/IP packets (paragraph 25).

As to claim 11, Zhang teaches the mobile station as set forth in claim 6 wherein said main controller is capable of transmitting to said wireless network a reverse channel notification message notifying said wireless network that a fault has been detected in said mobile station, wherein receipt of said reverse channel notification message is capable of causing said wireless network to transmit said mobile station diagnostic testing file to said mobile station (paragraph 13-17).

As to claim 12, Zhang teaches the mobile station as set forth in claim 11 wherein said reverse channel notification message comprises an identifier identifying a model type of said mobile station (paragraph 27).

As to claim 13, Zhang teaches for use in a wireless network comprising a plurality of base stations (figure 1 and paragraph 13-17), each of the base stations

capable of communicating with a plurality of mobile stations, a method of testing the operation of a first one of the plurality of mobile stations comprising the steps of:

storing in a database a mobile station diagnostic testing file comprising a mobile station diagnostic testing program in interpreted byte-code format;

receiving a notification indicating that a fault has occurred in the first mobile station and further capable;

in response to receipt of the notification, retrieving the mobile station diagnostic testing file from the database;

transmitting the mobile station diagnostic testing file to the first mobile station;
and

in response to receipt of the mobile station diagnostic testing file in the mobile station, executing in the mobile station the mobile station diagnostic testing program in the mobile station diagnostic testing file.

As to claim 14, Zhang teaches the method as set forth in claim 13 wherein the mobile station diagnostic testing file further comprises diagnostics data used to test the first mobile station (paragraph 13-17).

As to claim 15, Zhang teaches the method as set forth in claim 13 wherein the step of transmitting comprises the sub-step of transmitting the mobile station diagnostic testing file to the mobile station using TCP/IP packets (paragraph 25).

As to claim 17, Zhang teaches the method as set forth in claim 13 further comprising the step of determining from the notification a model type of the first mobile station and, in response to the determination, selecting the mobile station diagnostic

testing program according to the model type (paragraph 27).

As to claim 18, Zhang teaches for use in a mobile station capable of communicating with a wireless network (figure 1, 13-17), a method of performing an over-the-air (OTA) diagnostic testing of the mobile station from the wireless network comprising the steps of:

receiving and demodulating forward channel messages from the wireless network;

extracting from the demodulated forward channel messages a mobile station diagnostic testing file containing a mobile station diagnostic testing program in interpreted byte-code format; and

interpreting and executing the mobile station diagnostic testing program.

As to claim 19, Zhang teaches the method as set forth in claim 18 wherein the mobile station diagnostic testing file further comprises diagnostic testing data used to test the mobile station (paragraph 13-17).

As to claim 20, Zhang teaches the method as set forth in claim 18 wherein the forward channel messages comprise TCP/IP packets (paragraph 25).

As to claim 23, Zhang teaches the method as set forth in claim 18 further comprising the steps of: transmitting to the wireless network a reverse channel notification message notifying the wireless network that a fault has been detected in the mobile station; and in response to receipt of the reverse channel notification message transmitting the mobile station diagnostic testing file to the mobile station from the wireless network (paragraph 13-17).

As to claim 24, Zhang teaches the method as set forth in claim 23 wherein the reverse channel notification message comprises an identifier identifying a model type of the mobile station (paragraph 27).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4, 9, 10, 16, 21, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang in view of Smith (US 6,333,973).

As to claim 4, Zhang teaches the mobile station set forth in claim 6 wherein said mobile station diagnostic testing file is transmitted to said mobile station in said forward channel messages. Zhang fails to teach the forward channel messages using at least one short messaging service (SMS) message. Smith teaches the forward channel messages using at least one short messaging service (SMS) message (col.1, lines 41-47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Smith into the system of Zhang in order to enhance system performance of the automatic/system configuration monitoring and error tracking system and software upgrade tool kit which transmits different types of messages.

As to claims 9, 16 and 21, the limitation of the claims are the same limitation of claim 4; therefore, the claims are interpreted and rejected as set forth as in claim 4;

As to claims 10 and 22, Zhang teaches the mobile station diagnostic testing program interacting with a user of said first mobile station during said OTA diagnostic testing process as set forth in claim 6, Zhang fails further comprises using a graphical user interface (GUI) program. Smith teaches using a graphical user interface (GUI) program (col.5, line 63-col.6, line 7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Smith into the system of Zhang in order to enhance system performance of the automatic/system configuration monitoring and error tracking system and software upgrade tool kit which consolidate messages of different types for viewing and manipulate by the user.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Grenning (US 5,706,333) teaches the method and apparatus for analyzing cellular telephone network.

B. Parrillo (US 5,442,553) teaches the wireless motor vehicle diagnostic and software upgrade system.

C. Korkosz et al (US 6,262,659) teaches the telemetry of diagnostic messages from a mobile asset to a remote station.

D. Wieczorek et al (US 5,249,305) teaches the radio frequency error detection and correction system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C LE whose telephone number is 703-306-0542. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Danh C.Le



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